

Notice of Allowability

Application No.

10/091,924

Applicant(s)

INABA ET AL.

Examiner

PHAN T.H. PALMER

Art Unit

2874

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to September 22, 2003.
2. ☒ The allowed claim(s) is/are 2-10.
3. ☒ The drawings filed on 22 September 2003 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
- * Certified copies not received: _____.
5. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
 - (a) ☐ The translation of the foreign language provisional application has been received.
6. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

7. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
8. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No. _____.
 - (b) ☐ including changes required by the proposed drawing correction filed _____, which has been approved by the Examiner.
 - (c) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No. _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the margin according to 37 CFR 1.121(d).

9. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|---|
| 1 <input type="checkbox"/> Notice of References Cited (PTO-892) | 5 <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2 <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6 <input type="checkbox"/> Interview Summary (PTO-413), Paper No. _____ |
| 3 <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No. _____ | 7 <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4 <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8 <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9 <input type="checkbox"/> Other |

EXAMINER'S AMENDMENT

Amdt B/pmt

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with attorney Michael S. Leonard on November 12, 2003.

The application has been amended as follows:

- in claim 2, on lines 8, and line 10, "perform" changed to --preform--;
- in claim 3, on line 2, "optical fiber perform" changed to --optical fiber preform--;
- in claim 4, on line 2, and on line 9, "optical fiber perform" changed to --optical fiber preform--; and
- in claim 9, on line 2, "optical fiber perform" changed to --optical fiber preform--.

REASON FOR ALLOWANCE

2. Claims 2-9 are allowable over prior art, because none of the references in alone or in combination discloses.

+++ A polarization maintaining optical fiber preform comprising:

- a core element;
- a cladding element disposed around the core element; and

- two stress applying elements disposed in the cladding element to be approximately symmetrical with respect to the core element;
the perform formed by forming one insertion hole in the cladding element so as to pierce through the cladding element in parallel to the core element, subsequently rotating the optical fiber preform further including the insertion hole 180 degrees around the core element, followed by forming the other insertion hole in the cladding element so as to pierce through the cladding element in parallel to the core element, and subsequently inserting the stress applying elements into the insertion holes, as claims in claim 2.

+++ A method of producing a polarization maintaining optical fiber preform including a core element, a cladding element disposed around the core element, and two stress applying elements disposed in the cladding element to be approximately symmetrical with respect to the core element, comprising:

- a step of forming one insertion hole in the cladding element so as to pierce through the cladding element in parallel to the core element;
- a step of rotating the optical fiber preform further including the insertion hole 180 degrees around the core element;
- a step of forming the other insertion hole in the cladding element so as to pierce through the cladding element in parallel to the core element;
and

- a step of inserting the stress applying elements into the insertion holes,
as discloses in claims 4, and 7.

The underline limitations are critically, since the it produces a polarization maintaining optical fiber, avoid large distortions are anisotropically generated in the core, which causes birefringence in the polarization maintaining optical fiber.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

CONTACT INFORMATION

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to PHAN T.H. PALMER whose telephone number is 703-308-4848. The examiner can normally be reached on 4/4 OFF MONDAY.

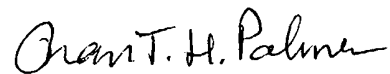
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, RODNEY B. BOVERNICK can be reached on 308-4819. The fax phone number for the organization where this application or proceeding is assigned is 703-308-7382.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 308-0956.

PTHP
November 12, 2003

A handwritten signature in cursive script that reads "Phan T. H. Palmer".

PHAN T. H. PALMER
PRIMARY EXAMINER